

Please substitute the Sequence Listing filed June 19, 2000 on pages 84-99 with the substitute Sequence Listing attached herewith as pages 1-28.

### **REMARKS**

For clarity, the rejections at issue are set forth in the order in which they were examined.

### **OATH/DECLARATION:**

Applicants submit herewith a new declaration in compliance with 37 C.F.R. § 1.67(a).

### **SPECIFICATION:**

Applicants submit an amendment to the Specification to remove the informalities objected to by the Examiner. *See* Office Action, page 3. *See also* page 4 of this Response to Office Action.

### **SEQUENCE REQUIREMENTS:**

The specification has been amended to provide sequence identifiers. Applicants' amendments do not introduce new matter.

The Examiner has requested that a Sequence Listing be provided. Applicants submit this Amendment and Response to provide as a separate part of the disclosure, a "Sequence Listing" pursuant to 37 C.F.R. §§ 1.821-1.825. Applicants submit herewith a substitute Sequence Listing in paper copy and in a computer readable form on a floppy disk. The contents of the paper and computer readable copies are the same and include no new matter.

### **CLAIMS:**

In a Response to Restriction Requirement, dated November 28, 2002, Claims 26-37 have been added, Claims 1-3 and 7-25 have been cancelled as being directed to non-elected groups, and Claims 4-6 have been elected. Claims 4-6 and 26-37 are currently pending. Claims 26-28, 30-32, 34-36 have been cancelled and Claims 38-60 have been added in the current amendment. For clarity, the rejections at issue are set forth in the order in which they were examined.

**Claim Rejections--35 U.S.C § 112**

Claims 27, 28, 31, 32, 35, and 36 have been rejected under 35 U.S.C. § 112, first paragraph, as "containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention." Applicants respectfully disagree. Applicants have previously cited pages "5-6, 38-41, 56-57, 63-64, etc." of the specification containing support for these claims. See page 4 of Response to Restriction Requirement, dated November 28, 2002. The examiner has noted that "the specification teaches that 'the cytosolic domain is defined approximately by amino acids 28-233' (see page 54, lines 27-28)" and has required applicants to provide specific support for the limitations in the specification or to remove them from the claims. See Office Action of March 22, 2002, page 4.

Applicants have cancelled Claims 26, 27, 28, 30, 31, 32, 34, 35, and 36 in the current amendment. Examiner's rejection is now moot. These amendments are made in order to further the prosecution of the present application and Applicants' business interests, yet without acquiescing to the Examiner's arguments. Applicants reserve the right to prosecute the original, similar, or broader Claims in one or more future application(s). None of the amendments to the Claims is intended to narrow the scope of any of the amended Claims within the meaning of *Festo (Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., No. 95-1066, 2000 WL 1753646 (Fed. Cir. Nov. 29, 2000.))*

Applicants respectfully request that Examiner add new claims 38-60. New claims 38-60 have examples of support in the specification on, but not limited to, page 5, lines 11-15, for polyclonal, monoclonal, and purified antibodies "to LAT fragments" and "to a polypeptide comprising at least a portion of the amino acid sequence of SEQ ID NO: 4." In another non-limiting example of support, the Definitions section of the specification on pages 19-20, lines 30-34 and 1-3 states, in part, that a fragment as used herein "refers to a polypeptide that has an amino terminal and/or carboxy-terminal deletion compared to the native protein, but where the remaining amino acid sequence is identical to the corresponding positions in the amino acid sequence deduced from a full-length cDNA sequence." The definition also states that the fragments are "preferably at least 20 amino acids long, usually at least 50 amino acids long or longer." There is support in the specification for not only the amino acid sequence of SEQ

ID NO: 4, but the Description of Figures, on page 9 lines 15-20, describes other LAT sequences such as murine LAT and an alternative spliced form of human LAT (SEQ ID NOS: 5 and 2 respectively). Additionally, the corresponding figures of these sequences, Figures 7B and 7D are also examples of support found in the specification.

Further examples of support in the specification is found on page 6 at lines 10-17. The paragraph describes a method of detection, but refers to the use of antibodies (polyclonal or monoclonal) for the detection of the presence of "a portion of the polypeptide having the amino acid sequence set forth in SEQ ID NO: 4." The method also provides for "an antibody capable of reacting with a portion of the polypeptide having the sequence set forth in SEQ ID NO: 4."

Another example of support in the specification is found on pages 38-41. More specifically, page 38, lines 15-33, describes methods on the generation of antibodies (polyclonal and monclonal) to LAT and LAT fragments. LAT and LAT fragments include, but are not limited to, the sequences provided by SEQ ID NOS: 2, 4 and 5 and fragments therein, which are described in the specification in at least the Description of Figures and Figures as discussed *supra*. Thus, Applicants have clearly demonstrated that support for new claims 38-70 is found at least, but not solely, in the specification on the pages cited above.

### **Priority**

The Examiner states on page 5 of the Office Action of March 22, 2002 that "the limitations recited in claims 27, 28, 31, 32, 35 and 36 which recites wherein said portion comprises amino acids 23-233 or 1-22 are not seen in the priority documents." Applicants respectfully disagree. Applicants are entitled to priority to all pending claims based on the provisional application 60/068,690 with a priority date of December 23, 1997. In addition, Applicants are also entitled to priority based on the PCT/US98/27400. The basis the Examiner states is now moot in light of the cancelled claims.

### **Claim Rejections--35 U.S.C. § 102**

The Examiner has rejected Claims 4, 6, 26-29, and 34-37 under 35 U.S.C. § 102(b) as being anticipated by Buday *et al.*, J. of Biol. Chem. 269:9010-9023 (1994). See Office Action of March 22, 2002, page 6. Applicants respectfully disagree. Claim 4 has been

amended by deleting "binds specifically to" and replacing with "is generated against." Claims 26, 27, 28, 34, 35, 36 have been cancelled. These amendments are made in order to further the prosecution of the present application and Applicants' business interests, yet without acquiescing to the Examiner's arguments. Applicants reserve the right to prosecute the original, similar, or broader Claims in one or more future application(s). None of the amendments to the Claims is intended to narrow the scope of any of the amended Claims within the meaning of *Festo (Festo Corp. v. Shoketsu Kinzoku Kabushiki Co., No. 95-1066, 2000 WL 1753646 (Fed. Cir. Nov. 29, 2000.))*

Applicants respectfully traverse this rejection, as the Buday *et al.* reference does not disclose each and every element of pending Claims 4, 6, 29, and 37 as amended. The Buday *et al.* reference does not read on amended Claims 4, 6, 29, and 37 because the Buday *et al.* reference does not teach antibodies generated against a polypeptide comprising at least a portion of the amino acid sequence of SEQ ID NO: 4. The 4G10 antibody from Upstate Biotechnology, Inc. cited in Buday *et al.* is not generated against a polypeptide comprising at least a portion of the amino acid sequence of SEQ ID NO: 4. The 4G10 antibody is a generic antibody generated against phosphotyramine coupled to KLH and is specific for phosphotyrosine (*see* Tab 1). The 4G10 antibody binds many different proteins as demonstrated by the list of references (*see* Tab 1) provided by Upstate Biotechnology, Inc., at [http://www.upstatebiotech.com/support/references/monoclonal\\_antibodies.html#05-321](http://www.upstatebiotech.com/support/references/monoclonal_antibodies.html#05-321). Therefore, Applicants respectfully request that this rejection be withdrawn.

The Examiner has rejected Claims 31 and 32 under 35 U.S.C. § 102(b) as being anticipated by Zhang *et al.* (Cell 92:83-92, 1998). *See* Office Action of March 22, 2002, page 7. Applicants respectfully disagree. Applicants respectfully traverse this rejection on the basis of priority to the Provisional Application dated December 23, 1997. The Provisional Application predates the January 9, 1998 date of the Zhang *et al.* reference. In addition, the January 9, 1998 date of the reference does not predate the December 23, 1998 filing date of the International Application PCT/US98/27400 by greater than one year, from which this application also claims priority. In addition, Examiner's rejection is moot in light of Applicants' cancellation of Claims 31, and 32. Therefore, Applicants respectfully request that this rejection be withdrawn.

The Examiner has rejected Claims 31, 32, 35, and 36 under 35 U.S.C. 102(b) as being anticipated by Weber *et al.*, (J. Exp. Med. 187:1157-1161, 1998). *See* Office Action of March 22, 2002, page 8. Applicants respectfully disagree. Applicants respectfully traverse this rejection on the basis of priority to the Provisional Application dated December 23, 1997. The Provisional Application predates April 6, 1998 date of the Weber *et al.* reference. In addition, the April 6, 1998 date of the reference does not predate the December 23, 1998 filing date of the International Application PCT/US98/27400 by greater than one year, from which this application also claims priority. In addition, Examiner's rejection is moot in light of Applicants' cancellation of Claims 31, 32, 35, and 36. Therefore, Applicants respectfully request that this rejection be withdrawn.

The Examiner has rejected Claims 4, 5, 26-33 under 35 U.S.C. § 102(e) as being anticipated by Hirth *et al.* (U.S. Patent 5,958,959 filed on 6/1/95). *See* Office Action of March 22, 2002, page 8. Applicants respectfully disagree. Applicants respectfully traverse this rejection on the basis that this reference does not teach each and every element of pending claims 4, 5, 29 and 33 as amended. Claims 26, 27, 28, 30, 31, and 32 have been cancelled. In view of the amendment, Hirth *et al.* does not teach antibodies generated against a polypeptide comprising at least a portion of the amino acid sequence of SEQ ID NO: 4. Therefore, Applicants respectfully request that this rejection be withdrawn.

#### **Claim Rejections--35 U.S.C. § 103**

The Examiner has rejected Claim 35 under 35 U.S.C. 103(a) as being unpatentable over Zhang *et al.* (cited *supra*) and further in view of Campbell (Monoclonal Antibody Technology, Elsevier Science Pub., NY, Chapter 1, pages 1-32, 1984). Applicants respectfully disagree. Applicants respectfully traverse this rejection for the following reasons. As discussed *supra*, Zhang *et al.*, is not prior art to the present application on the basis of priority to the Provisional Application and the International Application, which predate the reference. *See supra*. The combination of these two references is improper to support a rejection based on 35 U.S.C. § 103. In addition, this rejection is moot based on the cancellation of Claim 35. Therefore, Applicants respectfully request that this rejection be withdrawn as well.

**CONCLUSION**

The Applicant believes that the arguments and claim amendments set forth above traverse the Examiner's rejections and, therefore, request that all grounds for rejection be withdrawn for the reasons set above. Should the Examiner believe that a telephone interview would aid in the prosecution of this application, the Applicant encourages the Examiner to call the undersigned collect at 415.904.6500.

Dated: June 21, 2007 Judith S.H. Hom  
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